

June 7, 2002

Interested Parties:

This letter offers you the opportunity to suggest transportation research topics you feel would be productive for the Washington Department of Transportation to pursue. Your suggestions, along with other information, will assist the department in continuing an effective and productive research program for the next two years.

The WSDOT, in cooperation with Washington State University, the University of Washington and other private and public researchers, conducts a continuing program of contract research that supports the Department's mission, as follows:

Our mission is to keep people and business moving by operating and improving the state's transportation systems vital to our taxpayers and communities.

Research emphasis areas for the 2003-2005 biennium are as follows:

Maximize use of the existing infrastructure. Research proposals that address delay and/or allow for more efficient movement of goods and people on the existing transportation infrastructure are encouraged.

Traffic congestion measurement. Accountability to the legislature and the public requires improved performance measurement techniques for determining the level of traffic congestion, and the effect of actions taken to mitigate that congestion. Research proposals that improve data collection, measurement and analysis are of high importance.

Customer focused design and construction of transportation infrastructure. Research that facilitates rapid construction and rehabilitation of transportation infrastructure at minimum cost while assuring maximum useful life is a primary focus.

Environmental responsibility. Determining and mitigating the effects of transportation facilities and operations on the environment is a high priority. Research regarding water quality and threatened or endangered salmon issues, and directed toward streamlining permit approvals for preservation and improvement projects is especially relevant.

Cost-effectiveness. Research directed toward improving the cost-effectiveness of transportation programs, systems and facilities remains a high priority.

Bridges and Structures. Earthquakes, their effects on transportation systems and facilities, and the way in which transportation facilities can be designed and/or retrofitted to withstand them, continue to be a high priority for WSDOT research. Other issues of importance are bridge design efficiency improvements, development and implementation of improved bridge preservation methods, and development and assessment of new materials or methods for the construction of new bridges and rehabilitation of existing structures.

Intelligent Transportation Systems (ITS). Advanced technology applications for traveler information systems, traffic management systems, commercial vehicle operations, intermodal freight management systems, rural transportation, public transportation systems and safety enhancements using ITS technology, are all of interest.

Multimodal and Intermodal Transportation. Research addressing intermodal connections and facilities to more effectively transport people and goods is solicited; of particular interest are topics concerning freight mobility within the state, including truck, rail, air and water freight.

Construction and Materials. Research in the pavements area will focus on construction quality and construction inspection/training issues. Rapid construction strategies, rehabilitation of major urban corridors, mechanistic design tools, and implementation of Superpave are topics of continued interest. The geotechnical emphasis is on liquefaction issues, seismic zonation, lateral load designs for shafts and piles, and the use of marginal soils in construction.

The selection of a topic for funding does not obligate WSDOT to contract with its submitter for conducting the research. A separate process to select principal investigators, consistent with the state law and department policy, will be conducted after the program is announced. It is expected that the final, prioritized list of topics will be announced in January 2003. You will be notified at that time if your submittals are included in the funded program. Projects selected will not begin prior to July 1, 2003.

We strongly encourage submitters to contact WSDOT technical staff as soon as possible to gain further insight into WSDOT emphasis and needs, and to generate and develop ideas that are fully understood by both WSDOT and the submitter. For more information, please contact:

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Keith Anderson

Subject Areas: Construction, materials, geotechnical engineering, pavements, recycled materials, bridges and structures, seismic effects, maintenance.
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Jim Toohey

Subject Areas: Environment, traffic safety, design, hydraulics
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Doug Brodin

Subject Areas: Urban traffic congestion, traffic and ITS, planning, land use, freight, rail, air, pedestrians, bicycles, multimodal and intermodal transportation.
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Please submit a one-page, single-spaced description in the attached format for each topic. The attached form is also available on the WSDOT website at:

<http://www.wsdot.wa.gov/ppsc/research/solicitform.doc>.

Click on "What's New."

Suggested topics should be returned to the

WSDOT Research Office,

PO Box 47370,

Olympia, WA 98504-7370,

no later than September 20, 2002.

Research has made, and will continue to make, important contributions to the programs and services of WSDOT. I encourage and welcome your participation in this process.

Sincerely,

John Conrad

Assistant Secretary

Engineering and Regional Operations Division

[Blank Research Statement Form](#)
